bon and Bachman (1843) with reference to the actions of a badger in captivity, in part as follows:

We occasionally saw him assume rather an interesting attitude, raising the fore part of his body from the earth, drawing his feet along his sides, sitting up in the manner of the marmot, and turning his head in all directions to make observations.

The author (Dr. Coues) continues:

The assuming of this attitude may have been a result of confinement, as I have not observed it when I have seen the animal in a state of nature, nor does it appear to have been noticed by others.

While acting as the geologist of Captain Wm. A. Jones's Expedition through the Yellowstone Park, in 1873, I was enabled to make a few desultory notes concerning the wild animals, a list of which was published in the *American Naturalist* in February, 1874. On a little trip back over our trail along Yellowstone River and Pelican Creek, I passed through two or three of our deserted camps. Near one of these, my assistant shot a fine specimen of *Lepus bairdii,* Hayden,* which upon dissection proved to be a male, to my astonishment giving evidence of having recently suckled its young. The discovery of this interesting fact relating to this species had been made, with abundant evidence, by Dr. Merriam in the same region the preceding year, but this had not been made public at the time.†

At dusk, as we were preparing to camp near the lower end of Yellowstone Lake, we started up a badger which ran from us with its peculiar cross-legged, sidling lope until nearly out of range of rifle shot, when it suddenly turned, rose to a sitting posture, stroked its fore legs down along its side, eyeing us in very much the same manner as is customary with the marmot, remaining thus until I had discharged my carbine by a shot which struck the ground far enough in front to ensure his safety. Upon this he retreated some distance, repeating the performance several times as I advanced towards him, but not again remaining within gun-shot distance. This animal did not move off in a direct line, but pursued a tortuous course as it ran, very much as if he were attempting to dodge a pursuer gifted with greater powers of speed. Moreover, the general course lay along an open swale somewhat transverse to our line of approach. His whole demeanor was wary in the extreme, and fully sustained his reputation as a 'badger.'

Theo. B. Comstock.

Los Angeles, Cal.,
October 10, 1904.

* U. S. Geol. Surv. of Wyoming, etc., Hayden 6th Annual Report, 1872.

† In the article mentioned above (*Amer. Nat.*, 1874), I remarked that *Lepus bairdii* had not been met by me. This was because I had not then seen a description and so did not properly identify it at the time.

SPECIAL ARTICLES.

AMPHIBIA VERSUS BATRACHIA.

The question as to the proper systematic name of the class of vertebrates containing the frogs, toads, salamanders, etc., has been discussed in this journal several years ago by competent authorities with the result that the disputants agreed to disagree as they had done before. The conflicting arguments may be briefly stated as follows: *Amphibia* is the proper term, because it is the oldest class term, while on the other side it was contended that *Batrachia* is the only tenable name, since it is the appellation first given to the group having a compass essentially identical with the limits of the class in its modern acceptance. It is true that *Batrachia* was given to the group only as an order, but it was contended—and I believe correctly so—that it is more essential that the selection of names for groups higher than genera should be guided by their contents rather than by their rank. The law of priority, as distinctly specified by the American Ornithologists' Union code of nomenclature does not apply to these higher group names.

Those who accepted the name *Batrachia* did it under the universal impression that the first application of this term dated from Brongniart's use of the French form *Batraciens* in 1800, latinized in 1802 by Macartney into *Batrachia.* The order so designated corre-

sponded in all essentials to the modern class, including, as it did, both the salamanders and the frogs (though excluding the apodal Cæcilians).

I have long suspected, however, that the term was older, but in spite of persistent efforts I was unable to obtain access to a copy of the book I had in mind. Taking advantage, therefore, of my friend and colleague, Gerrit S. Miller's recent visit to Berlin I requested him to give me the results of an examination of the volume in case he should be able to find it in any of the libraries there. This he has kindly done and the result confirms my suspicion.

The book in question is by A. J. G. C. Batsch, and in entitled: 'Versuch einer Anleitung zur Kenntniss und Geschichte der Thiere und Mineralien.' It was published in Jena and consists of two parts, the first bearing the date of 1788 and containing the general introductory matter and the vertebrates, the other dated 1789, embracing the lower animals and the minerals.

According to Mr. Miller's analysis of the class *Amphibia* in the first part, Batsch divides it into four 'families,' viz., I., *Testudines;* II., *Batrachi;* III., *Lacertæ;* and IV., *Serpentes.* From the enumeration of the genera admitted by Batsch it is evident that he accepted without any essential alteration the scheme of classification proposed twenty years earlier by Laurenti in his 'Synopsis Reptilium,' though adding the turtles which Laurenti for some unexplained reason had left out. Thus the genera *Triton* and *Salamandra* are left with the *Lacertæ*, the cæcilians with the *Serpentes,* and the *Batrachi* consist solely of the genera *Pipa, Bufo, Rana* and *Hyla.* Batsch's BATRACHIA of 1788, therefore, is an exact equivalent of Laurenti's order SALIENTIA of 1768 and becomes a synonym pure and simple of the latter. We have thus traced the German usage of the word 'Batrachier' for the tailless order only, which was thought to have originated with Johannes Müller, in 1832, back to its first propounder.

It is then pretty plain that in view of this discovery the term *Batrachia* has become untenable for the whole class.

Under these circumstances there seems to be nothing else to do but to accept AMPHIBIA as the formal Latin name for the class as it is restricted at present. While there are many good reasons why it would be desirable to retain the word for the combined classes embraced in the term herpetology, I recognize that it would be utterly hopeless to attempt the substitution of a later name of approximately the compass of the present class.

LEONHARD STEJNEGER.
U. S. NATIONAL MUSEUM,
December 16, 1904.

AN ADAPTATION OF THE CARD CATALOGUE CABINET FOR THE STORAGE OF MICROSCOPIC SLIDES.

EVERY worker in natural history who has to prepare and handle quantities of microscopic slides is met with the problem of how to store them safely and in such form that they can be readily referred to. In the special field of Coccidæ in which the writer is interested there has accumulated in the collection of the Department of Agriculture at least 20,000 slides relating to, perhaps, a thousand different insects. To these additions are being constantly made and daily consultation with this slide collection is necessary for purposes of comparison and identification of the new material. The systems of slide storage which have been tried have all proved to be more or less cumbersome and not especially easy of reference except by consultation of indexes, and especially not elastic in the sense of allowing for indefinite additions. In other words, the different styles of grooved slide boxes once filled can not be added to, and in a growing collection it becomes necessary to have elaborate rearrangements at frequent intervals if anything like classification is attempted. If the slides be simply added seriatim the necessity arises for an elaborate card index and the consultation of many different slide boxes to get together the material representing one subject. It seemed to the writer that all these difficulties could be avoided by devising some plan similar to the method of the card catalogue of the different library bureaus.

The result of a study of the subject has